

In the Claims:

1. (Currently Amended) An isolated human vanilloid receptor (hVR) protein ~~or a variant thereof~~ encoded by a polynucleotide sequence comprising SEQ ID NO:4.
2. (Withdrawn) An isolated human vanilloid receptor (hVR) protein according to claim 1 which is hVR1 or a variant thereof.
3. (Currently Amended) An isolated human vanilloid receptor (hVR) protein according to claim 1 comprising the polypeptide sequence of SEQ ID NO:5 ~~which is hVR3 or a variant thereof.~~
4. (Withdrawn) An isolated human vanilloid receptor (hVR) protein according to claim 2 having an amino acid sequence as shown in Figure 3.
5. (Cancelled).
6. (Withdrawn) A nucleotide sequence encoding a human vanilloid receptor (hVR) protein or a variant thereof, or a nucleotide sequence which is complementary thereto.
7. (Withdrawn) A nucleotide sequence according to claim 6 encoding for an hVR1 protein or a variant thereof, or a nucleotide sequence which is complementary thereto.
8. (Withdrawn) A nucleotide sequence according to claim 6 encoding for an hVR3 protein or a variant thereof, or a nucleotide sequence which is complementary thereto.
9. (Withdrawn) A nucleotide sequence according to claim 6 which is a cDNA sequence.
10. (Withdrawn) A nucleotide sequence according to claim 7 which is a cDNA sequence
11. (Withdrawn) A nucleotide sequence according to claim 8 which is a cDNA sequence.
12. (Withdrawn) A nucleotide sequence according to claim 7 as shown in Figure 2.
13. (Withdrawn) A nucleotide sequence according to claim 8 as shown in Figure 17.
14. (Withdrawn) An expression vector comprising a nucleotide sequence according to any one of claims 6 to 13, which is capable of expressing an hVR protein or a variant thereof.

15. (Withdrawn) An expression vector according to claim 14 which is capable of expressing an hVR1 protein or a variant thereof.
16. (Withdrawn) An expression vector according to claim 14 which is capable of expressing an hVR3 protein or a variant thereof.
17. (Withdrawn) A stable cell line comprising an expression vector according to claim 14.
18. (Withdrawn) A stable cell line comprising an expression vector according to claim 15.
19. (Withdrawn) A stable cell line comprising an expression vector according to claim 16.
20. (Withdrawn) A stable cell line according to claim 17 which is a modified HEK293, CHO, COS, HeLa or BHK cell line.
21. (Withdrawn) A stable cell line according to claim 18 which is a modified HEK293, CHO, COS, HeLa or BHK cell line.
22. (Withdrawn) A stable cell line according to claim 19 which is a modified HEK293, CHO, COS, HeLa or BHK cell line.
23. (Withdrawn) An antibody specific for a human vanilloid receptor (hVR) protein or a variant thereof as claimed in any one of claims 1 to 5.
24. (Withdrawn) An antibody according to claim 23 which is specific for hVR1 or a variant thereof.
25. (Withdrawn) An antibody according to claim 23 which is specific for hVR3 or a variant thereof.
26. (Withdrawn) A method for identification of a compound which exhibits hVR modulating activity comprising contacting a human vanilloid receptor (hVR) protein or a variant thereof according to any one of claims 1 to 5 with a test compound and detecting modulating activity or inactivity.
27. (Withdrawn) A compound which modulates hVR activity, identifiable by a method according to claim 26.

28. (Withdrawn) A compound according to claim 27 for use in therapy.
29. (Withdrawn) The use of a compound according to claim 27 in the manufacture of a medicament for treatment or prophylaxis of a disorder which is responsive to the modulation of hVR activity in a human patient.
30. (Withdrawn) The use according to claim 28 wherein the disorder is pain, neuropathic pain, inflammatory pain, chronic pain, post-operative pain, rheumatoid arthritic pain, neuropathies, neuralgia, algesia, neurodegeneration, nerve injury, stroke, ischaemia migraine, irritable bowl syndrome (IBS), a respiratory disorder, asthma, chronic obstructive pulmonary disease (COPD), a urological disorder, neuropathy, incontinence, interstitial cystitis or an inflammatory disorder.
31. (Withdrawn) A method of treatment or prophylaxis of a disorder which is responsive to modulation of hVR activity in a human patient which comprises administering to said patient an effective amount of a compound according to claim 27.
32. (Withdrawn) A method according to claim 31 wherein the disorder is pain, neuropathic pain, inflammatory pain, chronic pain, post-operative pain, rheumatoid arthritic pain, neuropathies, neuralgia, algesia, neurodegeneration, nerve injury, stroke, ischaemia migraine, irritable bowl syndrome (IBS), a respiratory disorder, asthma, chronic obstructive pulmonary disease (COPD), a urological disorder, neuropathy, incontinence, interstitial cystitis or an inflammatory disorder.
33. (Withdrawn) A compound which modulates hVR activity, identifiable by a method according to claim 26, excluding the compounds capsaicin, resiniferatoxin, piperine, zingerone, polydodial, warburganal, aframodial, cinnamodial, cinnamosmolide, cinnamolide, isovelleral, scalaradial, ancistrodial, β -acaridial, scutigeral, merulidial, anandamide and capsazepine.
34. (Withdrawn) A compound according to claim 33 for use in therapy.
35. (Withdrawn) The use of a compound according to claim 33 in the manufacture of a medicament for treatment or prophylaxis of a disorder which is responsive to the modulation of hVR activity in a human patient.
36. (Withdrawn) The use according to claim 35 wherein the disorder is pain, neuropathic pain, inflammatory pain, chronic pain, post-operative pain, rheumatoid arthritic pain, neuropathies, neuralgia, algesia, neurodegeneration, nerve injury, stroke, ischaemia migraine, irritable bowl syndrome (IBS), a respiratory disorder, asthma, chronic obstructive pulmonary

disease (COPD), a urological disorder, neuropathy, incontinence, interstitial cystitis or an inflammatory disorder.

37. (Withdrawn) A method of treatment or prophylaxis of a disorder which is responsive to modulation of hVR activity in a human patient which comprises administering to said patient an effective amount of a compound according to claim 33.

38. (Withdrawn) A method according to claim 37 wherein the disorder is pain, neuropathic pain, inflammatory pain, chronic pain, post-operative pain, rheumatoid arthritic pain, neuropathies, neuralgia, algesia, neurodegeneration, nerve injury, stroke, ischaemia migraine, irritable bowl syndrome (IBS), a respiratory disorder, asthma, chronic obstructive pulmonary disease (COPD), a urological disorder, neuropathy, incontinence, interstitial cystitis or an inflammatory disorder.

39. (Withdrawn) A compound identified by the method according to claim 26.

40. (Withdrawn) A compound according to claim 39 for use in therapy.

41. (Withdrawn) The use of a compound according to claim 39 in the manufacture of a medicament for treatment or prophylaxis of a disorder which is responsive to the modulation of hVR activity in a human patient.

42. (Withdrawn) The use according to claim 41 wherein the disorder is pain, neuropathic pain, inflammatory pain, chronic pain, post-operative pain, rheumatoid arthritic pain, neuropathies, neuralgia, algesia, neurodegeneration, nerve injury, stroke, ischaemia migraine, irritable bowl syndrome (IBS), a respiratory disorder, asthma, chronic obstructive pulmonary disease (COPD), a urological disorder, neuropathy, incontinence, interstitial cystitis or an inflammatory disorder.

43. (Withdrawn) A method of treatment or prophylaxis of a disorder which is responsive to modulation of hVR activity in a human patient which comprises administering to said patient an effective amount of a compound according to claim 39.

44. (Withdrawn) A method according to claim 43 wherein the disorder is pain, neuropathic pain, inflammatory pain, chronic pain, post-operative pain, rheumatoid arthritic pain, neuropathies, neuralgia, algesia, neurodegeneration, nerve injury, stroke, ischaemia migraine, irritable bowl syndrome (IBS), a respiratory disorder, asthma, chronic obstructive pulmonary disease (COPD), a urological disorder, neuropathy, incontinence, interstitial cystitis or an inflammatory disorder.

45. (Withdrawn) A method of producing an hVR protein or a variant thereof according to any one of claims 1-5 comprising introducing into an appropriate cell line a suitable vector comprising a nucleotide sequence encoding for an hVR protein or a variant thereof, under conditions suitable for obtaining expression of the hVR protein or variant thereof.

46. (Withdrawn) A method of producing an hVR1 protein or a variant thereof comprising introducing into an appropriate cell line a suitable vector comprising a nucleotide sequence encoding for an hVR1 protein or a variant thereof, under conditions suitable for obtaining expression of the hVR1 protein or variant thereof.

47. (Withdrawn) A method of producing an hVR3 protein or a variant thereof comprising introducing into an appropriate cell line a suitable vector comprising a nucleotide sequence encoding for an hVR3 protein or a variant thereof, under conditions suitable for obtaining expression of the hVR3 protein or variant thereof.

48. (Currently Amended) A human vanilloid receptor (hVR) protein according to claim 3 ~~or a variant thereof~~ for use in a method of screening for agents useful in the treatment or prophylaxis of a disorder which is responsive to the modulation of hVR activity in a human patient.

49. (Original) A human vanilloid receptor (hVR) protein according to claim 48 wherein the disorder is pain, neuropathic pain, inflammatory pain, chronic pain, post-operative pain, rheumatoid arthritic pain, neuropathies, neuralgia, algesia, neurodegeneration, nerve injury, stroke, ischaemia migraine, irritable bowel syndrome (IBS), a respiratory disorder, asthma, chronic obstructive pulmonary disease (COPD), a urological disorder, neuropathy, incontinence, interstitial cystitis or an inflammatory disorder.

50. (Withdrawn) A human vanilloid receptor (hVR) protein according to claim 48 or 49 which is hVR1 or a variant thereof.

51. (Currently Amended) A human vanilloid receptor (hVR) protein according to claim 48 or 49 which is hVR3 ~~or a variant thereof~~.